Health and Sexual Rights: Design, Development, and Assessment of the Massive Open Online Course on Lesbian, Gay, Bisexual, Transgender, and Intersex Health Promotion in Brazil

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Abstract

Background: *Massive Open Online Courses (MOOCs) are a teaching format with universal access and the potential and viability to be implemented by health professionals. Despite their proven success in providing high-quality continuing education, usage and offerings of this technology are still scarce in Brazil.*

Materials and Methods: *This article describes the development of an online-based education strategy (MOOC) on the topic of health policies aimed at the Lesbian, Gay, Bisexual, Transgender, and Intersex (LGBTI+) population and analyzes its performance and reach after 6 months.*

Results: *This introductory MOOC course on LGBTI+ health included an assortment of multimedia material and consisted of 30 h of autonomous learning activities divided into two modules, with problem-based evaluation strategies. During its 6-month promotion period, the course had a total of 3,000 people enrolled with a completion rate of ~20%.*

Conclusions: *Results point to a high interest in LGBTI+ health and high demand for training on this topic among health professionals. This was the first course of its kind administered in Brazil. The MOOC format was successful and reliable in enabling the teaching-learning process.*

Keywords: *education, MOOC, distance learning, health promotion, vulnerable groups, telehealth*

Introduction

There is an increasing demand for health training and qualification that incorporate broader participation mechanisms and a more flexible teaching-learning process. This demand is in line with the online-based education teaching-learning technology model via virtual learning environments. In this context, Massive Open Online Courses (MOOCs) have risen as a teaching format with universal access and the potential and viability to be implemented by health professionals.[1]

The MOOC format was developed in Canada[2] in 2008 to expand and share the teaching-learning process freely and massively, with the help of network technologies. In little over a decade, it emerged as a teaching mechanism in the health field in high-income countries, for example, the United States, Canada, Australia, and Western European countries.[3]

Despite its proven success in enabling high-quality continuous education, most of the literature in this topic is in English and needs to be expanded into low and middle-income countries.[4] In Latin America, the first MOOC was launched in 2013 at the University of São Paulo, using the Veduca platform.[5] In stark contrast with high-income countries, where the number of massive health courses surpasses 4,000, usage and offerings of this technology are still scarce in Brazil.[6]

A glaring gap is the lack of training on sexual health and human rights, given that continuous education about contents, skills, and practices is crucial in this area. For health professionals, information is key for reducing the stigma around gender identity and sexual orientation, remedying the lack of knowledge regarding sexual rights, standing against discrimination and other forms of violence, and supporting the fight against HIV/AIDS and the spread of sexually transmitted diseases.[7–9]

Therefore, there is an urgent need inside the Brazilian public health system to establish public policies regarding gender

identity, race, and ethnicity markers, since these policies help balance severe inequities inside the country.[10] As a strategy to hinder this inequity, the National Policy for the Health of Lesbian, Gay, Bisexual, and Transgender (LGBT) People was enacted in 2011 and identified various urgencies, including the need to promote this topic and train professionals for promoting the civic and sexual rights of the Lesbian, Gay, Bisexual, Transgender, and Intersex (LGBTI+) population.[11,12]

In 2018, the World Health Organization (WHO) published an extensive report addressing the causes of disparities in health services access and utilization for LGBT Persons in Latin America.[13] This document pointed that stigma and discrimination as major obstacles that prevent LGBT persons from accessing healthcare services and that one of the most urgencies are training and sensitization of healthcare providers. Particularly in Brazil, studies show that professionals of health have poor knowledge about the theme and that leads to fragility and disarticulation of the care regarding the LGBT community.[14]

This study describes the design, development, and assessment process of an online-based course that uses the MOOC format to offer a new and pioneering training on the topic of sexual rights and health involving LGBTI+ health promotion in Brazil.

Materials and Methods

STUDY TYPE

A descriptive and analytic study aimed at describing the development of a distance training strategy and assessing its performance and reach after 6 months.

PARTICIPANTS

The inclusion criterion was people who concluded the MOOC course during the first 6 months after launch. Data analysis included a questionnaire filled out by participants during enrollment, with questions intended to discover their interest on gender identity and sexual orientation in the health field and indicators of the quality of content available and whether it met their demand.

ETHICAL CONSIDERATIONS

The course proposal and its assessment are part of a group of activities approved by the Research Ethics Committee of the Federal University of Rio Grande do Sul (UFRGS).

INTERVENTION

Promotion and participant enrollment. The MOOC course was designed using the Moodle software and it was made available on a distance learning platform in which courses are offered free of charge by the UFRGS, hosted at their website.* Course promotion consisted of e-mails aimed at health departments throughout the country and the snowball method based on messages promoted via Facebook and Whatsapp.

Course structure. The distance learning course consisted of two modules and eight classes, totaling 30 h of training. The material was developed by a multiprofessional team that included teachers, researchers, and managers that deal with the topics of health equity policies. During 6 months, the team selected scientific articles, book chapters, health laws, international institutional stepping stones from the WHO and audiovisual products. The content selection was based on four workshops and a focus group for evaluating how the material was organized.

The first module dealt with basic concepts: Health and Social Determinants; The Brazilian Health System; Violence and Vulnerability; and Definitions of Sex, Gender Identity, and Sexual Orientation. There were five lessons with the following structure: mandatory video or podcast; a mandatory scientific text and a folder with assorted complementary material, which was optional and adapted to each student's intended training journey.

A test with five questions was administered at the end of this module. The second module was only available after achieving a minimum grade.

The second module covered the contents of the National Policy for the Health of LGBT, and how they interact with public health policies for equity in the context of promoting a health and peace culture. There were three lessons that followed a pattern identical to the ones in the first module. In the end, another test with five questions was administered. The final certificate was awarded after approval on both modules.

After enrollment, students had 1 month to finish the training. Participants were not charged. Funding was granted by the Ministry of Health by means of a resource decentralization project from the UFRGS and the Federal Institute of Rio Grande do Sul, which are public institutions from the state of Rio Grande do Sul maintained by the Brazilian Ministry of Education.

INSTRUMENTS USED DURING THE COURSE

Questionnaire about the personal and professional profile of participants. Participants were invited to answer a questionnaire about their personal and professional profile during enrollment.

Performance assessment and grading. There were two tests with multiple choice questions about problems related to the

*https://lumina.ufrgs.br/course/view.php?id=62

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Table 1. Personal and Professional Profile of Participants Who Completed the Course

	MINIMUM	MAXIMUM	AVERAGE AGE (STANDARD DEVIATION)
Age	15	68	29.4 ± 9.9
		N	%
Gender identity			
Cis man		119	20.4
Trans man		4	0.7
Cis woman		334	57.4
Trans woman		7	1.2
Other		41	7.0
Nonbinary		14	2.4
Not reported		37	6.4
Total		582	100
Race/Color			
White		351	60.3
Black		207	35.6
Asian		6	1.0
Indigenous		2	0.3
Not reported		16	2.8
Total		582	100
Sexual orientation			
Lesbian		45	7.7
Gay		82	14.1
Bisexual		60	10.3
Heterosexual		335	57.6
Other		18	3.1
Not reported		42	7.2
Total		582	100
Place of living			
Urban		517	88.8
Rural		36	6.2
Not reported		29	5.0
Total		582	100
Level of education			
High school		45	7.8
Undergraduate		246	42.3
Graduate		116	19.9

continued →

Table 1. *continued*

	MINIMUM	MAXIMUM	AVERAGE AGE (STANDARD DEVIATION)
Age	15	68	29.4 ± 9.9
		N	%
Postgraduate		155	26.6
Not reported		20	3.4
Total		582	100
Professional of the Brazilian National Health System (SUS)			
Yes		109	18.7
No		402	69.1
Not reported		71	12.2
Total		582	100

topic and everyday healthcare situations. To obtain approval and certification, participants had to achieve a minimum grade of 75% for the test at the end of each module.

DATA ANALYSIS

Participant data are presented as absolute and relative frequencies. Continuous variables are presented as means (standard deviation) and nominal variables are presented as percentages.

Results

The introductory MOOC course on the health of the LGBTI+ population was launched in May 2019 and has had 3,000 people enrolled as of July 2019.

Out of the 3,000 people enrolled, 19.4% ($n = 582$) concluded the final evaluation and obtained certification. *Table 1* shows the heterogeneity of participants in regards to age group (from 15 to 68 years of age) and gender identity (57.4% cis women and 20.4% cis men). The table also shows that 60.3% ($n = 351$) of people identified themselves as white and 35.6% ($n = 207$) identified themselves as black (comprising black and mixed, as per the methodology used by the Brazilian Institute of Geography and Statistics).

It is also possible to see that, out of the total of people who completed the course, 57.6% ($n = 335$) identified themselves as heterosexual, whereas 14.1% ($n = 60$) identified themselves as gay men, 7.7% ($n = 45$) as lesbian women, and 7.2% ($n = 42$) chose not to report their sexual orientation.

There was a predominance of participants who lived in an urban area, totaling 88.8% ($n = 517$), in comparison to 6.2% ($n = 36$) who lived in a rural area. In regards to the level of education, undergraduates were the majority, with 42.3% ($n = 246$), whereas 26.6% ($n = 155$) of participants were postgraduates and 19.9% ($n = 116$) were graduates. 18.7% ($n = 109$) of the people who completed the course were professionals from the Brazilian Public Health System (SUS).

Table 2, about the main topics discussed on the MOOC, shows that 63.6% ($n = 370$) of participants who completed the MOOC stated they had never participated in training related to health of the LGBTI+ population and 48.1% ($n = 280$) had never interacted with social movements or Nongovernmental Organizations related to the LGBTI+ population in their region. A considerable percentage of participants, 60.1% ($n = 350$), declared they were not aware of health service actions aimed at the LGBTI+ population on their region.

Table 3, about how participants came across information about the MOOC, shows that 53.1% ($n = 309$) of the participants were introduced to the course by recommendations from friends and colleagues, whereas 17.2% ($n = 100$) of participants found the information on the website of the UFRGS.

Figure 1 is a map of Brazil maps showing the areas to which certificates were issued, as a way of subsidizing a geographic scale analysis.

Table 2. Answers Regarding the Main Themes Discussed at This Massive Open Online Course from Participants Who Completed the Course

	N	%
Have you ever participated in any training activities related to LGBTI+ health?		
No	370	63.6
Yes	184	31.6
Not reported	28	4.8
Total	582	100
Do you interact with social movements or NGOs that deal with the LGBTI+ population in your region?		
No	280	48.1
Yes	168	21.9
Not reported	134	30
Total	582	100
Are you aware of any LGBTI+ health actions or services in your region?		
No	350	60.1
Yes	58	10
Not reported	174	29.9
Total	582	100

LGBTI+, Lesbian, Gay, Bisexual, Transgender, and Intersex; NGO, Nongovernmental Organization.

Table 3. Ways of Accessing Information About This Massive Open Online Course

	N	%
How did you come across information about this course?		
Searching on Google	31	5.3
Facebook	19	3.3
University website	100	17.2
Other social networks	99	17
Recommendation from friends/colleagues	309	53.1
Not reported	24	4.1
Total	582	100

Discussion

The completion rate of ~20% for this MOOC exceeds the typical average, which stands at about 2–10%, considering the number of people who reached the necessary grades and received the certificate by the total number of people enrolled.[15] This indicator shows that there is interest in the topic of LGBTI+ population and health in Brazil.[16,17] The overall success and the interest of a young audience in this MOOC[18] can be attributed to the convenience of distant education and the role it plays in students' motivation, and to the usage of a variety of innovative educational resources. Literature has shown that flexibility of MOOC and capacity of the learner to check the content in diverse forms are some potentials for the conclusion of the process.[19] The creation of this MOOC considered as base rule the multipossibility of choosing the contents in the multiplatform interface used by UFRGS, including modalities like videos and podcasts.

This pioneering endeavor of using MOOC in Brazil will possibly support the telemedicine strategies that are already consolidated in the country, while also contributing in the short term to the training of teleconsultants regarding the topics studied.[20] We believe that the form of organization of the contents of this MOOC, with organic discussions that actually give materiality to the health practices of intersectionality about race, gender, and sexual diversity, increases the interest of health professionals because it addresses inequities in a cross-sectional perspective and according to international guidelines.[21]

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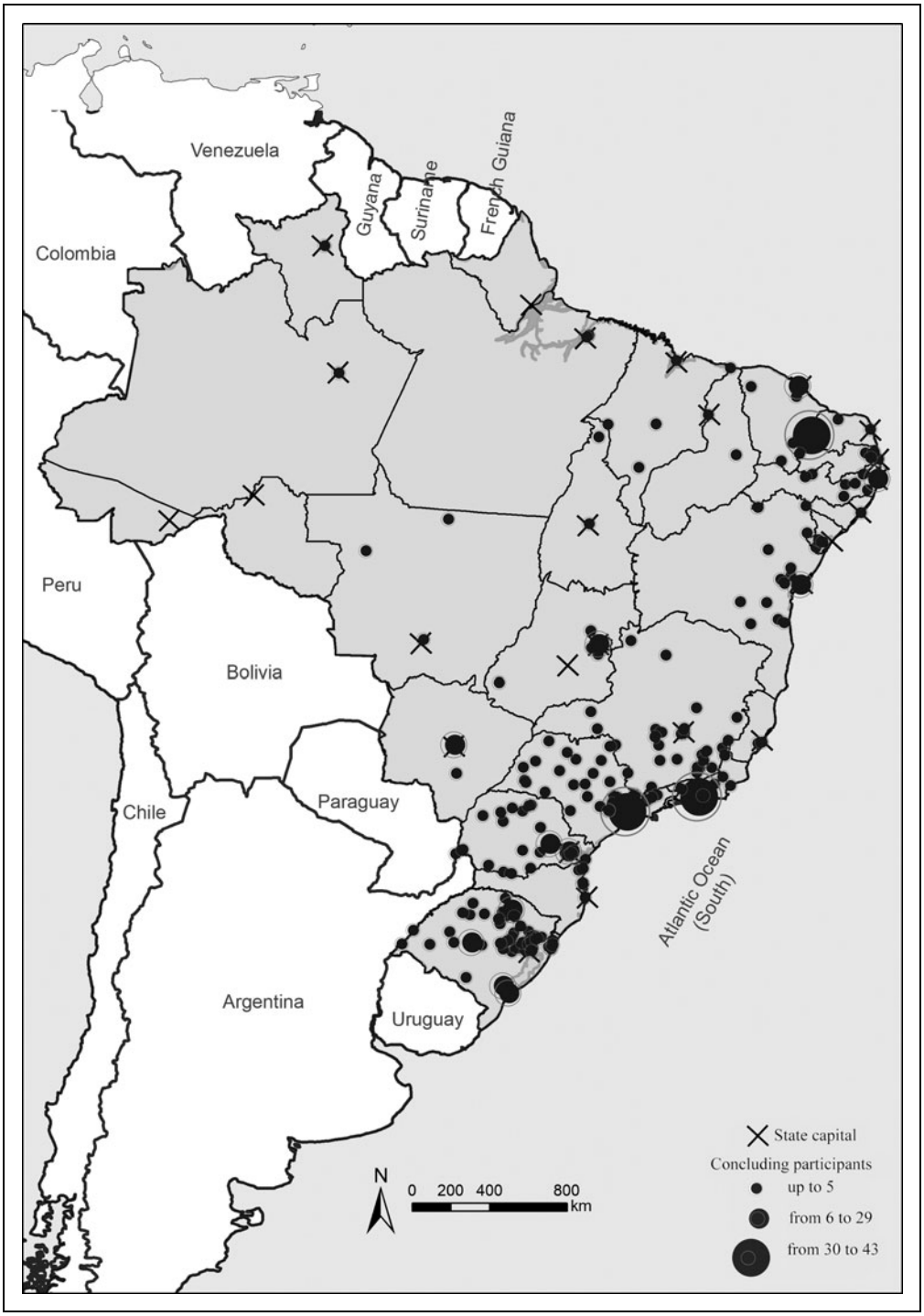

Fig. 1. MOOC concluding participants in Brazil. MOOC, Massive Open Online Course.

The capillarity of this MOOC can be seen on the map that shows how students who completed the course are spread throughout Brazil (*Fig. 1*), especially in states along the coastline. The sprawled out and widely distributed points in the states of São Paulo and Rio de Janeiro (Southeast) and Rio Grande do Sul (South) can be explained by the social, economical, cultural, and historical connection of these regions, which result in a faster flow of information and, therefore, make these areas more prone to the spread of MOOCs and their reproduction on local networks (e.g., friends and colleagues

connected by digital social networks). The map also indicates that the MOOC was an effective strategy for the inland expansion of this knowledge and was not restricted to the southern Brazilian axis, but rather encompassed various points in Brazil, such as the Northeastern region of the *sertão* and parts of the Northern region. Brazil is a country with continental dimensions, therefore the inland expansion of training processes is a major challenge. Consequently, the results of our study show that the MOOC strategy is capable of facing this challenge, allowing for the multiplication of contents in the most far-off places of the country.

The relatively low cost of producing an MOOC and its potential for disseminating knowledge in a complex geographical scale are essential for making this tool an important element for optimizing public services and improving public policies. Improvements in equity policies emanating from the federal administration must be supported by high-impact, low-cost strategies (e.g., MOOCs) to train health professionals and professionals from other areas, such as social assistance, education, and public security. Spreading technical and scientific knowledge across multiple languages and access formats such as MOOCs and improving the quality of public policies are ways of enhancing professional qualification and social control inside SUS.

This analysis will open the way for new proposals on how to promote strategies on social networks to widen the public and the number of people who complete this MOOC. This could include adopting educational strategies such as reorganizing contents and formats, implementing debate forums, and monitoring evasion in the first few weeks after enrollment.[22,23]

Conclusions

Professionals from the whole country showed a high level of interest in the health of the LGBTI+ population. The demand came from a variety of groups and was not restricted to health professionals. It also included cities from the countryside, which demonstrates the capillarity and potency of distant training promoted by MOOCs.

The MOOC format was successful and reliable in enabling the teaching-learning process.

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Disclosure Statement

No competing financial interests exist.

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